

**REMARKS**

Claims 1-20 are all the claims presently pending in the application. Claims 5-6 and 11-15 are amended to more clearly define the invention and claims 16-20 are added. Claims 1, 6, and 11 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicants also note that, notwithstanding any claim amendments herein or later during prosecution, Applicants' intent is to encompass equivalents of all claim elements.

Applicants gratefully acknowledge the Examiner's indication that claims 2, 4-5, 7, and 9-10 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants respectfully submit that all of the claims are allowable.

Claims 1, 6, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Miyamoto reference in view of the Yasuhiro, et al. reference. Claims 3, 8, and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Miyamoto reference in view of the Yasuhiro, et al. reference and yet further in view of the Sohne, et al. reference.

These rejections are respectfully traversed in the following discussion.

**I. THE CLAIMED INVENTION**

A first exemplary embodiment of the claimed invention, as defined by, for example, independent claim 1, is directed to a hard disk unit that performs reading and writing data in response to an access from a host equipment. The hard disk unit includes an encoder that

generates a specific bit string as an encoding key by performing a predetermined arithmetic operation using at least one of identification information relating to the host equipment and identification information relating to a controller device of the host equipment, and encodes data that is to be written with the encoding key, and a recording unit that records the data encoded by the encoder.

Conventional external storage hard drives have attempted to protect copyrighted material through file-based encoding applications that are executed by a host computer which require a user identification and/or a user password. However, it is cumbersome for a user to enter an identification and password each time that user wants to access data on that hard drive.

Further, such a file-based encoding scheme does not protect the contents of the hard drive if it is disconnected from the host computer and accessed using another computer.

In stark contrast, an exemplary embodiment of the claimed invention provide a hard drive with an encoder that generates an encoding key that was generated based upon at least one of a host equipment identifier and a host equipment controller identifier and that encodes data using the generated encoding key. In this manner, the present invention is capable of maintaining the security of the data on the hard drive should the hard drive become disconnected from the host equipment.

## **II. THE 35 U.S.C. § 101 REJECTION**

The Examiner alleges that claims 11-15 are directed to non-statutory subject matter. While Applicants submit that the subject matter of claims 11-15 recite statutory subject matter, to speed prosecution, claims 11-15 have been amended in accordance with Examiner

Snizek's very helpful suggestions.

In view of the foregoing, the Examiner is respectfully requested to withdraw this rejection.

### III. THE PRIOR ART REJECTION

#### A. The Miyamoto reference in view of the Yasuhiro, et al. reference

Regarding the rejection of claims 1, 6, and 11, the Examiner alleges that the Yasuhiro et al. reference would have been combined with the Miyamoto reference to form the claimed invention. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

None of the applied references teaches or suggests the features of the claimed invention including a hard disk unit comprising an encoder. As explained above, this feature, in combination with the feature of using an encoding key that was generated based upon at least one of a host equipment identifier and a host equipment controller identifier, is important for maintaining the security of the data on the hard drive should the hard drive become disconnected from the host equipment.

Indeed, the Examiner does not even allege that the applied references teaches or suggests a hard disk unit comprising an encoder.

Rather, the Examiner merely cites the Miyamoto reference which, in the Examiner's own words, only discloses "a host (personal computer) comprising an encoder (16)."

Further, the Miyamoto reference specifically discloses only that the host equipment is capable of performing the encoding. In particular, the Miyamoto reference makes it very

clear that “the personal computer 3 encodes the decoded content using the host ID and records the content on the CD-R 4(step 105).” [0100]

Therefore, the Miyamoto reference very clearly does not teach or suggest a hard disk unit comprising an encoder, let alone a hard disk unit that comprises an encoder that generates an encoding key, or a hard disk unit that comprises an encoder that generates an encoding key based upon at least one of a host equipment identifier and a host equipment controller identifier.

The Examiner appears to realize that the Miyamoto reference does not teach or suggest a hard disk unit and attempts to remedy this deficiency by referring to the Yasuhiro et al. reference. The Examiner appears to allege that modifying the disclosure of the Miyamoto reference to replace the CD-R disks with a hard disk unit would form the claimed invention.

However, as explained above, the deficiency of the Miyamoto reference is not merely the lack of a disclosure of a hard disk unit.

Even assuming arguendo, that one of ordinary skill in the art would have replaced the CD-R disks that are disclosed by the Miyamoto reference with a hard disk unit, such would still not form a method or system that corresponded to the plain meaning of the language of the claimed invention.

The CD-R disks disclosed by the Miyamoto reference clearly do not include an encoder, let alone a hard disk unit that comprises an encoder that generates an encoding key, or a hard disk unit that comprises an encoder that generates an encoding key based upon at least one of a host equipment identifier and a host equipment controller identifier.

Therefore, merely substituting a hard disk unit for the CD-R disks that are disclosed by the Yasuhiro, et al. reference would not form the claimed invention.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 1, 6, and 11.

**B. The Miyamoto reference in view of the Yasuhiro, et al. reference in yet further view of the Sohne et al. reference**

Regarding the rejection of claims 3, 8, and 13, the Examiner alleges that the Yasuhiro et al. reference would have been combined with the Miyamoto reference and further alleges that the Sohne et al. reference would have been combined with the Yasuhiro et al. reference and the Miyamoto reference to form the claimed invention. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

None of the applied references teaches or suggests the features of the claimed invention including a hard disk unit comprising an encoder. This feature, in combination with the feature of using an encoding key that was generated based upon at least one of a host equipment identifier and a host equipment controller identifier, is important for maintaining the security of the data on the hard drive should the hard drive become disconnected from the host equipment.

As explained above, the Miyamoto reference and the Yasuhiro, et al. reference do not teach or suggest these features.

The Sohne et al. reference does not remedy these deficiencies of the Miyamoto reference and the Yasuhiro et al. reference.

Indeed, the Examiner does not allege that the Sohne, et al. reference remedies these deficiencies.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 3, 8, and 13.

### III. FORMAL MATTERS AND CONCLUSION

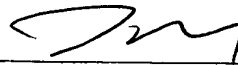
In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1-20, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 12/15/12

  
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